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MICROGNATHUS ERUGATUS, A NEW MARINE
PIPEFISH FROM BRAZIL (PISCES: SYNGNATHIDAE)

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In the course of recent fieldwork by the junior author in Central and South America, we have been fortunate to obtain a single specimen of an unusual marine pipefish. Characters of this new species are so distinctive that we do not believe it necessary to delay its description until more specimens are available.

The holotype has been deposited in the Museum de Zoologia da Universidade de São Paulo (MZUSP), Brazil. Measurements are in millimeters (mm).

Appreciation is expressed to Dr. Naercio A. Menezes (MZUSP) for making this specimen available for study. The entire J. L. Almeida family of Salvador, Brazil is thanked for their hospitality and active participation in the field. This work was supported in part by National Science Foundation Grant GB 31053X.

Micrognathus erugatus, new species

Figure 1

Holotype: MZUSP 9408 (64 mm SL, female); Brazil, Bahia, rock tidepool about 1 km S of Arembepe, approx. 12°45' S, 38°10' W, 0-1.3 m, chemical ichthyocide; 26 August 1972, C. E. Dawson and party.

Diagnosis: Dorsal-fin rays 19, located on 0.5 trunk rings and 4.5 tail rings; trunk rings 20; tail rings 36; pectoral-fin rays 13 (2); anal-fin rays 2; caudal-fin rays 10; head length 5.9; snout length 1.9; length of

¹ Deceased.



FIG. 1. Head and anterior body of *Micrognathus erugatus* MZUSP 9408; holotype; 64 mm SL.

dorsal-fin base 4.9; caudal-fin length 2.0; body ridges smooth, poorly developed.

Description: Head ridges indistinct, only snout, supraorbital and opercular ridges visible. Opercle with 20 or more rows of minute pock-like depressions radiating from the indistinct median ridge. Excurrent gill openings extend to top of head. Body ridge pattern typical of *Micrognathus*, i.e., lateral trunk ridge deflected ventrad at anal ring thence continuous with inferior tail ridge; superior tail ridge deflected at dorsal fin to become lateral tail ridge, ending free near middle of last trunk ring. Body ridges rounded, indistinct; intermedial scutellar plates on trunk and anterior portion of tail equal about half width of individual rings. Pectoral cover plate without ridges but with a few pocklike depressions; pectoral-fin length equals about 1.75 trunk rings. Head-in-SL 10.8; snout-in-head 3.1; dorsal-fin base-in-head 1.2.

Color in alcohol mainly dark brown with indications of 5 darker bands on upper sides and dorsum of trunk and 10 on tail; tip of upper jaw white; narrow white cross bar below angle of gape; white surrounds nares and continues as narrow, irregular bar across snout; streaks of white radiate from eye and one streak extends posteriad as narrow blotch on opercle; pectoral-fin base and top of head mottled with white; pale blotches bisect dark trunk and tail rings. Dorsal-fin rays streaked with brown near bases, fin otherwise pale; caudal fin mainly brown, but uppermost ray and distal margin white.

Etymology: *erugatus*, from the Latin *e*, not, + *rugatus*, wrinkled, in allusion to the almost smooth head and body.

Discussion: The genus *Micrognathus* now includes the subgenera *Micrognathus*, *Anarchopterus* and *Minyichthys* (Herald and Randall, 1972). Counts of 13–17 trunk rings occur in all but the two known species of the Pacific *Minyichthys*, which is characterized by 19–21 trunk rings and well-developed head and body ridges. The 20 trunk rings of *M. erugatus* suggest a close relationship with *Minyichthys*, but its smooth head and poorly developed ridges are atypical of *Minyichthys*. In the latter characters, *Micrognathus erugatus* is similar to the smooth-bodied Atlantic American *Anarchopterus*, but the anal fin is absent in this subgenus.

The unique holotype of *Micrognathus erugatus* was collected with eight specimens of the wide-ranging (Florida–Brazil) *M. vittatus* (Kaup). This is the only Atlantic representative of the subgenus *Micrognathus*, although seven of its nine Pacific congeners fall in this characteristically sharp-ridged subgenus. The western Atlantic species *Micrognathus dawsoni* (Herald, 1969) was originally placed in the subgenus *Micrognathus*, but its body ridges are not sharp edged and it is the only long-snouted species in a genus otherwise noted for short-snouted forms.

The Atlantic *Micrognathus* group presents somewhat of an enigma in that there are now five species, representing four intrageneric trends, and two species (*M. dawsoni* and *M. erugatus*) do not fall within described subgeneric limits. These two species are known only from unique female holotypes and additional study material will hopefully help clarify relationships within the genus.

LITERATURE CITED

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